

PREPARATION OF COMPONENTS FOR TRANSPORTATION FUELS

ABSTRACT OF THE INVENTION

5 Economical processes are disclosed for the production of components for refinery blending of transportation fuels by selective oxidation of feedstocks comprising a mixture of hydrocarbons, sulfur-containing and nitrogen-containing organic compounds. Oxidation feedstock is contacted with a soluble quaternary ammonium salt containing halogen, sulfate, or bisulfate anion, and an immiscible aqueous phase comprising a source of hydrogen peroxide, and at least one member 10 of the group consisting of phosphomolybdic acid and phosphotungstic acid, in a liquid reaction mixture under conditions suitable for reaction of one or more of the sulfur-containing and/or nitrogen-containing organic compounds. Blending components containing less sulfur and/or less nitrogen than the oxidation feedstock are recovered 15 from the reaction mixture. Advantageously, at least a portion of the immiscible acid-containing phase is recycled to the oxidation.